Available online at www.sciencedirect.com

ScienceDirect

Procedia - Social and Behavioral Sciences 106 (2013) 264 – 272

Procedia Social and Behavioral Sciences

4th International Conference on New Horizons in Education

A training model for "typesetting operator" profession in the publishing industry (design - implementation - evaluation)

Orhan Sevindik[a*], Seçil Gürün Karatepe[b], Akif Kemal Karatepe[c]

[a] İstanbul Arel University, Vocational School, "İstanbul", Turkey
[b] İstanbul Arel University, Vocational School, "İstanbul", Turkey
[c] İstanbul Arel University, Vocational School, "İstanbul", Turkey

Abstract

Nowadays the main problem that faced by people is adapted to rapidly the conditions of life by the effect of technology. The field that that technological alteration is felt mostly is undoubtedly the experience of individual business. In behalf of to adapt the steps of alteration and innovation of technology, the individual is required to take some steps to improve him in this business life. Either, is required to gain completely different qualifications by retraining totally in new field. Nowadays, the situation which corresponds to words as "Life / Lifelong Learning" creates the main axis of adult education activities. In accordance with transferred above, this study; aimed to planning, implementation and evaluation by the approach of "process" model that provided by the science of adult education to give a professional skill individuals who volunteered.

In the evaluation process; was used Participant Information Form, Self- Sufficiency Rating Scale (at the beginning and the end of the course). At the analysis of research data, were benefit from percentage, standard deviation, and correlation techniques of descriptive statistics.

Keywords: Publishing, Training Model, Typesetting Operator

1. INTRODUCTION

The developments in science and technology that caused radical changes in our daily lives, at the present time, anymore the knowledge has become a produce by recycling every day again. From the end of the 20th century, the rapid change and transformation, has laid the foundations of the creation of human model that aware the requirements of continuous learning / learning of workforce in all business lines (Gültekin. 2004).

* Corresponding author. Tel.: +90 212 540 96 96/2196; fax: +90 212 540 97 97
E-mail address: orhansevindik@arel.edu.tr

doi:10.1016/j.sbspro.2013.12.031

Anymore, the truth that cultural changes are shorter than human life and we live in the times that could not able to pass a life with information learned in his youth has been stood in front of us (Knowles, 1990). Gaining the qualification related a work and can become perform the profession constitutes the essence of the maintaining life. The development and advancement of the profession of the individual and place this in the basic needs of him constitutes the fact that people do in a process of lifelong vocational training. The process, at the same time also has been put forwarded the fact that individuals are self-managed. Work to establish a life-long learning education system which can control educational content, methods and results of individuals that have gained the ability to self-directed learning has been required to be main task of adult education.

The process of self-development of people, learning trends and capacities, past lives and the interaction of the individual with the environment, has been revealed the truth that the adults stand in a different spot than learning of children. The process that starting with adult learning has shown the fact those adults can also learn and additionally they have different interests and abilities from children to us. (Knowles, 1990). The andragogy is a general name given a theory that occurs as a result of studies on adults. The first use of the word Andragogy has been by Knowles. Andragogy has been issued as a concept that used in education of adults against the pedagogical approach used in the education of young people. (Weygand, 2001).

The process of computerizing of written production or an interview or conversation that taken audio recording generally is called as typesetting in Turkey. In the certification training programs which purposed professional, technical and cultural that prepared under the protocol that signed between Ministry of Education, Ankara Metropolitan Municipality and Gazi University, the Typesetting Operator; are defined as qualified persons who transfers to the computer using the keyboard with a letter F, editing the information how desired and have qualifications to redact the job that done, who has ability to do his own job by himself and in certain period. It has been indicated as a third level of profession in a frame of European Qualifications (Qualifications Turkey).

Since 1997, the personnel requirement analysis that directed to printing industry has been made periodically by Gültekin and his friends (Gültekin, 2004), (Tokmak and Sevindik 2004), (Gültekin and his friends 2007). As a result of analysis, has been seen that the sector is in a need of personnel which increases every day. The only research in the field of publishing; has been realized by Kansu and his friends. According to the research which titled as “Advertising Agencies and Labor Market Requirement Analysis of Publishing Industry (Ankara Province -2011-2014)” by Kansu and his friends, between 2011- 2014, the requirement of typesetting for Ankara are estimated to be 315 people (Kansu and his friends 2011).

2. Mission (Purpose)

The purpose of this study, by developing training program directed to adults for the profession (Typesetting Operator) that located in the printing and publishing industry is evaluated the results of the program. The answers of following questions were searched in research for the specified purpose. These questions are;

- What is the direction of change that qualifications of adults which admitted to gain skills related to Computer Applications in Publishing / Typesetting Operator at starting and ending?
- Can content of created course give enough information to the participants?

3. Practice (Method)

In this chapter are included research model, the developed program curriculum, universe, sample, data collection, and resolution.

3.1. Research Model

The research model has been created in 3 stages. At the first stage; has been developed competency-based modular training program under the name of "Computer Applications in Publishing (Typesetting Operator – Typesetter) Course". The developed program; is approved by the Ministry of National Education and are given an approved certificate at the end of the course. The developed program that occurs 3 modules as "F Keyboard 1 "Editing Page on Computer 1" and "Editing Page on Computer 2" and covers a period of 108 hours. As far in the second stage, by applying course into two consecutive terms have been realized the application of designed model. In the third stage, by giving Self-Sufficiency Scale to the participants both at the beginning and the end of the course; evaluation information has been collected by evaluating themselves.

3.2. Universe and Sampling

The trainees who participated to 22. and 23. Term BELTEK Courses has been generated the universe of research. As for the working group covers trainees that participated the courses. In each term, 20 people have been participated to "Computer Applications on Publishing". Both two courses, has ended with 20 people as the number of people at the beginning. To fill Self- Sufficiency Form which left the desire of the trainees that attending courses, has been filled by all participants in the ongoing course both at the beginning and the end of the course. In this way, totally 40 pieces Check-in Self-Sufficiency forms and 40 pieces Check-out Self-Sufficiency forms has been obtained to measure the alterations at the beginning and the end of the course.

3.3. Collecting data and Analysis

The data which will be used in scope of the research was collected with Self-Sufficiency Scale that created. The scale was created by taking into account that Typesetting Operator/Typesetter should know in accordance with the content which prepared in the frame of protocol that signed between Ministry of National Education, Ankara Metropolitan Municipality and Gazi University. Prepared Self-Sufficiency scale is presented to the opinion of experts. The scale that revised again according to expert opinions, the data has been collected by filling to the participants at the first day and the last day of the course. The Self-sufficiency Scale consists 21 items related to 3 modules. The question that includes in Self-Sufficiency has been divided into four in itself. According to this; 4 items of Self-Sufficiency Scale are related to Typesetting and the Application, and 6 of them are related to General Printing Information, and 9 of them are related to General Design Information and 3 of them are related to Typographical Editing Information. For each item, 6 point likert scale has been used. According to 6 point likert scale, has been requested to evaluate themselves from participants. According to this, "0" means that the participants have no information about this matter, "5" means that they have enough information on this matter.

The data that obtained in the scope of research analyzed by using statistical programs in the context of frequency, standard deviation and correlation.

4. Evidences

4.1. Evidences of Demographic and Reliability

The Self-Sufficiency Scale which used in the scope of Research were examined the state of reliability. In general terms to put forward the reliability of Self-Sufficiency Scale was benefit from Cronbach's alpha statistic. After the analysis; the alpha value of the scale that is equal to 7.0 or upper (Hair and Others, 1995)

has been determined as minimum criteria to verify the reliability of the scale. The data which shows the reliability status of Self-Sufficiency Scale are presented in Table 1.

Table 1. The Reliability Status of Self-Sufficiency Scale

Cronbach's Alpha	N of Items
,972	44

Looking at the table that shows the status of Self-Efficacy Scale reliability, the reliability of the questions which used in the scope of questionnaire was very high compared to 0.972 according to Cronbach Alfa statistic. The expressions which used in scale have appeared properly understood and significant by the participants.

According the research; the table which shows the gender distribution of the demographic characteristics of the participants has been located in Table 2.

Table 2. Distribution of Participants In Terms of Gender

	Frequency	Percent
Female	22	55,0
Male	18	45,0
Total	40	100,0

Looking at the gender distribution of participants; the participants has been consisted %55 from women, and % 45 from men.

In the scope of research, the table which shows the age distribution of trainees who participated in the study has been located in Table 3.

Table 3. Distribution of Participants In Terms of Age

	Frequency	Percent
Between age 20 to 30	25	62,5
Between age 31 to 40	12	30,0
Between age 41 to 50	2	5,0
51 and over age	1	2,5
Total	40	100,0

Looking at the distribution of age of trainees, has appeared that 62,5% of participants are between 20 to 30, 12% are between 31 to 40 age, 5% are between 41 to 50 age and 2,5% are also 51 and over it. According to the table; participants were mainly concentrated in age from 20 to 30. The frequency of between 20-30 years old that participants are the most intense is also 25.

4.2. Evaluation of General Printing House Information Articles

The Self- Sufficiency Scale which used in scope of the research, 5 items has been given related to General Printing House Information. The distributions that shows input and output values and the mean and standard deviation of items which has been given related General Printing House Information has been located in Table 4.

Table 4. Self-Sufficiency Scale – The Input-Output Distributions of "General Printing House Information" Items

	N	Nr of questions	Range	Minimum	Maximum	Mean	Std. Deviation
General Printing House (Input)	40	5	5	0	5	1,40	1,626
General Printing House (Output)	40	5	3	2	5	3,77	,649
Valid N (listwise)	40						

Looking at the table related to Input and Output ratings of General Printing House Information items which evaluated by participants; is given in input level as value of lowest 0, as highest as 5. The average of evaluation of General Printing House Information (Input) is 1.40 and the standard deviation is 1.626. Looking at the data (Output) of General Printing House Information is given 2 as lowest and 5 as highest. The average of General Printing House Information (Output) items is 3.77 and standard deviation is 0.646.

The correlation between "General Printing House Information" of Self-Sufficiency Scale and Input-Output related items has been examined. The table which shows the correlation values between Input-Output of General Printing House Information Items has been located in Table 5.

Table 5. Self-Sufficiency Scale – The Input and Output Distribution of "General Printing House Information" Items

		General Printing House (Input)	General Printing House (Output)
General Printing House (Input)	Pearson Correlation	1	,811(**)
	Sig. (2-tailed)		,000
	N	40	40
General Printing House (Output)	Pearson Correlation	,811(**)	1
	Sig. (2-tailed)	,000	
	N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

According to the correlation analysis that made between the given values before training and the values at the end of the training which gives to the items that measured General Printing House Information of Participants; between both two values which are given related to General Printing House Information is seen a significant level of differentiation ($P<0,05$) and this differentiation was detected as strong (0,811) in positive direction.

4.3. Evaluation of General Design Information Items

In Self- Suffiency Scale which used in the scope of research; 9 items has been given related General Design Information. The distributions that shows input and output values and the mean and standard deviation of items which has been given related General Design Information has been located in Table 6.

Table 6. Self-Sufficiency Scale "The Input and Output Distribution of "General Design Information" Items

	N	Nr of questions	Range	Minimum	Maximum	Mean	Std. Deviation
General Design (Input)	40	9	5	0	5	1,59	1,661
General Design (Output)	40	9	3	3	5	3,89	,597

Valid N (listwise)	40

Looking at the table related to Input and Output ratings of General Printing House Information items which evaluated by participants; are given the value of 0 as lowest, 5 as highest in input level. The average of evaluation of General Design Information (Input) is 1.59 and the standard deviation is 1.661. Looking at the data (Output) of General Design Information is given 3 as lowest and 5 as highest. The average of General Design Information (Output) items is 3.89 and standard deviation is 0.597.

The correlation between "General Design Information" of Self-Sufficiency Scale and Input-Output related items has been examined. The value which shows the values of correlation between Input-Output items of General Design Information is located in Table 7.

Table 7. Self-Sufficiency Scale- The Input and Output Distribution of "General Printing House Information" Items

		General Design (Input)	General Design (Output)
General Design (Input)	Pearson Correlation	1	,798(**)
	Sig. (2-tailed)		,000
	N	40	40
General Design (Output)	Pearson Correlation	,798(**)	1
	Sig. (2-tailed)	,000	
	N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

According to the correlation analysis that made between the given values before training and the values at the end of the training which gives to the items that measured General Design Information of Participants; between both two values which are given related to General Design Information is seen a significant level of differentiation (P<0,05) and this differentiation was detected as strong (0,798) in positive direction.

4.4. Evaluation of Items of Typographical Editing Information

In Self- Suffiency Scale which used in the scope of research; 3 items has been given related Typographical Editing Information. The distributions that shows input and output values and the mean and standard deviation of items which has been given related Typographical Editing Information has been located in Table 8.

Table 8. Self-Sufficiency Scale- The Input and Output Distribution of "Typographical Editing Information" Items

	N	Nr of questions	Range	Minimum	Maximum	Mean	Std. Deviation
Typographical Editing (Input)	40	3	5	0	5	1,23	1,681
Typographical Editing (Output)	40	3	3	2	5	3,72	,686
Valid N (listwise)	40						

Looking at the table related to Input and Output ratings of Typographical Editing Information items which evaluated by participants; are given the value of 0 as lowest, 5 as highest in input level. Looking at the table related to Input and Output ratings of Typographical Editing Information items which evaluated by participants; are Typographical Editing Information (Input) is 1.23 and the standard deviation is 1.681. Looking at the data (Output) of Typographical Editing Information is given 2 as lowest and 5 as highest. The average of Typographical Editing Information (Output) items is 3.72 and the standard deviation is 0.686.

The correlation between "Typographical Editing Information" of Self-Sufficiency Scale and Input-Output related items has been examined. The value which shows the values of correlation between Input-Output items of Typographical Editing Information is located in Table 9.

Table 9. Self-Sufficiency Scale- The Input and Output Distribution of "Typographical Editing Information" Items

		Typographical Editing (Input)	Typographical Editing (Output)
Typographical Editing (Input)	Pearson Correlation	1	,746(**)
	Sig. (2-tailed)		,000
	N	40	40
Typographical Editing (Output)	Pearson Correlation	,746(**)	1
	Sig. (2-tailed)	,000	
	N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

According to the correlation analysis that made between the given values before training and the values at the end of the training which gives to the items that measured Typographical Editing Information of Participants; between both two values which are given related to Typographical Editing Information is seen a significant level of differentiation (P<0,05) and this differentiation was detected as strong (0,796) in positive direction.

4.5. Evaluation of Items of Typesetting Information / Application

In Self- Suffiency Scale which used in the scope of research; 4 items has been given related Typesetting Information / Application. The distributions that shows input and output values and the mean and standard deviation of items which has been given related Typesetting Information / Application has been located in Table 10.

Table 10. Self-Sufficiency Scale- The Input and Output Distribution of "Typesetting Information / Application" Items

	N	Nr of questions	Range	Minimum	Maximum	Mean	Std. Deviation
Typesetting / Application (Input)	40	4	5	0	5	1,64	1,227
Typesetting / Application (Output)	40	4	2	3	5	4,01	,503
Valid N (listwise)	40						

Looking at the table related to Input and Output ratings of Typesetting Information / Application items which evaluated by participants; are given the value of 0 as lowest, 5 as highest in input level. Looking at the table related to Input and Output ratings of Typographical Editing Inform Typesetting Information / Application items which evaluated by participants; are Typesetting Information / Application (Input) is 1.64 and the standard deviation is 1.227. Looking at the data (Output) of Typesetting Information / Application is given 3 as lowest and 5 as highest. The average of Typesetting Information / Application (Output) items is 4.01 and the standard deviation is 0,503.

The correlation between "Typesetting Information / Application" of Self-Sufficiency Scale and Input-Output related items has been examined. The value which shows the values of correlation between Input-Output items of Typesetting Information / Application is located in Table 11.

Table 11. Self-Sufficiency Scale- The Input and Output Distribution of "Typesetting Information / Application" Items

		Typesetting Information / Application (Input)	Typesetting Information / Application (Output)
Typesetting Information / Application (Input)	Pearson Correlation	1	,717(**)
	Sig. (2-tailed)		,000
	N	40	40
Typesetting Information / Application (Output)	Pearson Correlation	,717(**)	1
	Sig. (2-tailed)	,000	
	N	40	40

** Correlation is significant at the 0.01 level (2-tailed).

According to the correlation analysis that made between the given values before training and the values at the end of the training which gives to the items that measured Typesetting Information / Application of Participants; between both two values which are given related to Typesetting Information / Application is seen a significant level of differentiation (P<0,05) and this differentiation was detected as strong (0,717) in positive direction.

5. Conclusion and Recommendations

As a result of the study, are reach to the following conclusions.

These evidences which made within the context of creating the design of the course content, implementation and evaluation of the results has been shown to us from the moment when they started classes and applications until the end of the course that the participants have significant and strong alteration in positive direction. They subjects that they don't have any information at the beginning of the course, in the later period of course have knowledge about these matters and have adopted information which provides basis of related the profession, gained basic experience as a result of applications.

The module that has been generated during the design of program is designed in accordance with the purpose of education and has been determined that the participants' level of knowledge relatively contributes the ascending upper than the beginning. In addition to be in the change of positive direction and development in all modules; appear to have a decrease in the relative of the participants related to Typesetting Information / Application. This decline is expected due to the applications on the use of ten-finger keyboard. By the application of the use of ten-finger keyboard, also has been expected to sufficient in time considering by increasing the practice of hand to use continuously.

The compliance that applied curriculum; come close to the values and the relationship of the results of the correlation analysis that made under group information of each item, has revealed that it is appropriate and integrated as instructional among themselves (in the curriculum) of each training module. During the application of each module has been supported and complemented each other.

6. Kaynakça

Gültekin, G.G., (2007), Yetişkin Eğitimi Bilimi Işığında Mesleki Eğitim *e-Journal of New World Sciences Academy,* Volume: 2, Number: 1 (pp. 1-14)

Knowles, S.M., (1990), *Adult Learners: A Neglected Species,* Gulf Publishing Company, Revised Edition Houston

Weingand, D.E. (1996), A Reminder About Andragogy, *Jurnal of Education for Library and Information Sicence,* v37 n1 (pp. 79-80)

Gültekin, G.G., (2004), *Ofset Baskı Sektöründeki Yardımcı Grafikerler İçin Andragojik Yaklaşıma Dayalı Bir Yetiştirim Modeli,* Yayınlanmamış Doktora Tezi, Ankara

Tokmak, E., Sevindik, O., (2004), *Matbaa Meslek Yüksekokullarının Yeniden Yapılandırılmasının Gerekliliği Üzerine Bir Araştırma, Araştırmaya Dayalı Olarak Matbaa Programcılığı Önerisi,* Yayımlanmamış Lisans Tezi, Ankara.

Gültekin, G.G., Tokmak, E., Sevindik, O. (2007), Ankara İli Basım Sektörü Eleman İhtiyacı, *II. Uluslararası Matbaa Teknolojileri Sempozyumu,* (pp.311), Ankara

Kansu, N., Sevindik, O., Bayram, S. (2011), Reklam Ajansları ve Yayıncılık Sektörünün İş Piyasası İhtiyaç Analizi (Ankara İli 2011-2014), *IV. Uluslararası Matbaa Teknolojileri Sempozyumu,* (pp.511-522), Ankara

Haır, J. F., Anderson, R. E., Tatham, R. L. And Black, W. C. (1995): *"Multivariate Data Analysis",* New Jersey: Prentice Hall.